General Information About Drinking Water

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. More information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and microbiological contaminants call the EPA *Safe Drinking Water Hotline* at 1-800-426-4791. Or by visiting http://water.epa.gov/drink/contaminants.

Our Water Sources

Source	Water Type
Beebe Draw Well A	Ground Water Under The Influence Of Surface Water
Beebe Draw Well B	Ground Water Under The Influence Of Surface Water
Beebe Draw Well C	Ground Water Under The Influence Of Surface Water
Well 7R South Platte	Ground Water
Well 11 South Platte	Ground Water
Well 12 South Platte	Ground Water
Well 13 South Platte	Ground Water
Well 17 South Platte	Ground Water
Well 18 South Platte	Ground Water
Purchased Water From Thornton	Surface Water

Brighton's Water Treatment Facility

Brighton℠

PRSRT STD
U S POSTAGE
PAID
BRIGHTON, CO USA
PERMIT NO. 31

Postal Customer
Brighton, Colorado 80601

Brighton℠

Public Water System ID # CO0101025

2014 Drinking Water Quality Report

Esta es informacion importante. Si no la pueden leer, necesitan que alguien se la traduzca

The City of Brighton is pleased to present the 2014 Water Quality Report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact David Anderson at 303-655-2102 with any questions about the Drinking Water Consumer Confidence Report (CCR) or for public participation opportunities that may affect the water quality. Brighton's Water Department is committed to providing its customers with high quality drinking water. We feel that it is important for you and your family to be aware of how that quality is maintained and feel comfortable with and informed about the water treatment process.

Our Source Water

Brighton's drinking water comes from alluvial wells in the South Platte River Basin, the BeeBe Draw Alluvium just below Barr Lake and approximately 33% is pumped from the city of Thornton. Groundwater is generally, very clean and pure, and lacks many of the contaminants that can be found in surface water as soils can act as a natural filter. You can help protect our water supplies by limiting the use of pesticides, fertilizers and outdoor chemicals. Remember, anything that is poured onto the ground or in the streets has the potential for reaching the alluvium.

Source Water Assessment Report

The Colorado Department of Public Health and Environment has provided us with a Source water Assessment Report for our water supply. You may obtain a copy of the report by visiting **http://wqcdcompliance.com/ccr** The report is located under "Source Water Assessment Reports" and then "Assessment Report by County" Select ADAMS County and find 101025; BRIGHTON CITY OF or by calling David Anderson at 303-655-2102. The Source Water Assessment Report provides a screening level evaluation of potential contamination that ***could*** occur. It ***does not*** mean that the contamination ***has or will*** occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition the source water assessment results provide a starting point for developing a sourse water protection plan. For a list of public meetings ***Visit us online at www.brightonco.gov***. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

Sources of Drinking Water

The sources of drinking water, both tap water and bottled water, include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material. It can also pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides that may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants, can be naturally occurring or be the result of oil and gas production and mining activities."

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children) it is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If concerned about lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead

Definitions

Action Level (**AL**): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (**MCL**): The "maximum allowed" is the highest level of a contaminant that is allowed in drinking water. MCL are set as close to the MCLG as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (**MCLG**): The "goal" is the level of a contaminant in drinking water, below which there is no known or expected risk to health. MCLG allow for a margin of safety.

Maximum Residual Disinfectant Level (**MRDL**): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Non-Detects (**ND**) or **Below Detection Level** (**BDL**): Laboratory analysis indicates that the constituent is not present. ("<" Symbol for less than, the same as ND or BDL)

Not Tested (**NT**): Not tested.

Parts per billion (**ppb**) or **Micrograms per liter** (**mg/l**): One part per billion corresponds to one minute in 2,000 years, or one penny in $10,000,000.

Parts per million (**ppm**) or **Milligrams per liter** (**mg/l**): One part per million corresponds to one minute in two years or one penny in $10,000.

PicoCuries per Liter (**pCi/l**): A measure of radioactivity in water.

Detected Contaminants

The City of Brighton routinely monitors for contaminants in your drinking water according to Federal and State laws The following tables show all detections found in the period of January 1 to December 31, 2013 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are low and not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report. **Note:** Only detected contaminates sampled within the last five years appear in this report. If no tables appear in this section then no contaminates were detected in the last round of monitoring

Inorganic Contaminates Sampled at the Entry Point to the Distribution System

Contaminant Name	YEAR	Average of Individual Samples	Range of Individual Samples (Lowest—Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Source
BARIUM	2013	.01	.01—.01	2	ppm	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	2013	.99	.94—1.04	2	ppm	4	4	No	Runoff from fertilizer use, sewage, erosion of natural deposits
NITRATE	2013	5.02	2.3—6.8	2	ppm	10	10000	No	Discharge from petroleum factories. Discharge from chemical factories

Volatile Organic Contaminates Sampled at the Entry Point to the Distribution System

Contaminant Name	YEAR	Average of Individual Samples	Range of Individual Samples (Lowest—Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Source
ETHYLBENZENE	2013	.65	0—.7	6	ppb	700	10	No	Runoff from fertilizer use, sewage, erosion of natural deposits
XYLENES, TOTAL	2013	1.43	0—2.3	6	ppb	10000	100	No	Discharge from steel and pulp mills; Erosion of natural deposits.

Radionuclide's Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average	Range Low—High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Sources
Gross Alpha	2013	3.46	1.9 to 5.02	2	pCi/L	15	0	No	Erosion of natural deposits
Combined Radium	2013	0.15	0.1 to 0.2	2	pCi/L	5	0	No	Erosion of natural deposits
Combined Uranium	2013	5.02	3.3 to 3.4	2	pCi/L	30	0	No	Erosion of natural deposits

Lead and Copper Sampled in the Distribution System

Contaminate Name	Monitoring Period	90th Percentile	Number of Samples	Unit of Measure	AL	Sample Sites Above Action Level	Typical Source
COPPER	6/27/2011 To 7/18/2011	.27	30	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaking from wood preventives
LEAD	6/27/2011 To 7/18/2011	3	30	ppb	15	0	Corrosion of household plumbing Systems; Erosion of natural deposits

Disinfection Byproducts Sampled in the Distribution System

Contaminate Name	Year	Average	Range Low—High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	2013	17.15	3.68—61.16	28	ppb	60	N/A	No	By-product of drinking water disinfection
TTHM	2013	39.55	7.6—100.5	28	ppb	80	N/A	No	By-product of drinking water disinfection

Summary of Turbidity Sampled at the Entry Point to the Distribution System

Contaminant Name	Sample Date	Level Found	TT Requirement	TT Violation	Typical Source
TURBIDITY	August 2013	Highest single measurement: .296 NTU	Maximum 1 NTU for any single measurement	No	Soil Runoff
TURBIDITY	December, 2011	Lowest monthly percentage of samples meeting TT requirements for our technology: 100%	In ant month at least 95% of samples must be less than 0.3 NTU	No	Soil Runoff

Microorganism Contaminates Sampled in the Distribution System

Contaminant Name	Monitoring Period	# of Samples Beyond Level	Sample Size	MCL	MCLG	MCL Violation	Typical Sources
Coliform (TCR)	July 2013	3.33% Positive Samples	60	No more than 5.0% positive samples per period (If sample size is greater than or equal to 40) **OR** No more than 1 positive sample period (if sample size is less than 40)	0	Yes	Naturally present in the environment
E. coli		1		Routine and a Repeat Sample are Total Coliform Positive, and one is also Fecal Positive/E.Coli positive		No	Human and animal fecal waste

Violations, Significant Deficiencies, and Formal Enforcement Actions

Violations

Name	Category	Time Period	Health Effects	Compliance Value	TT Level or MCL
Coliform (TCR)	MCL (TCR), ACUTE—MCL	07/01/2013-07/31/2013	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliform were found in more samples than allowed and this was a warning of potential problems.	0 N/A	N/A

Additional Violation Information

Note: If any violation relates to failing to install adequate filtration or disinfection equipment or processes, or have had a failure of such equipment or processes then the water may be inadequately treated. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses and parasites, which can cause symptoms such as nausea, cramps, diarrhea and associated headaches. Explanation of the violation(s) and the steps taken to resolve them.

There are no additional violations for 2013

Thornton Water

Contaminant Detected	MCL	MCLG	Range of Detection (min - max)	Units	Likely Sources of Contaminants
Metals					
Antimony	6	6	0.2 - 0.3	ppb	Discharge from petroleum refineries, fire retardants, ceramics, electronics, solder
Arsenic	10	0	1 - 1.3	ppb	Runoff from orchards, glass and electronics production, erosion of natural deposits
Barium	2,000	2,000	34 - 53	ppb	Drilling wastes, metal refineries, erosion of natural deposits
Chromium	100	100	1 - 1.9	ppb	Erosion of natural deposits
Selenium	50	50	0.7	ppb	Discharge from petroleum and metal refineries, erosion of natural deposits, mines
Lead	AL > 15 90% of samples ≤ 15	0	0.6 - 35 90% of samples ≤ 3.3 One site above AL	ppb	Household plumbing, battery manufacturing, erosion of natural deposits
Copper	AL > 1,300 90% of samples ≤ 1,300	1,300	81 - 1,000 90% of samples ≤ 820	ppb	Household plumbing, wood preservatives, erosion of natural deposits
Disinfectants					
Chlorine	4	4	0.02 - 2.9	ppm	Added in the water treatment process
Inorganic Chemicals					
Cyanide	200	200	13	ppb	Discharge from steel/metal, plastic, and fertilizer factories
Fluoride	4	4	0.5 - 1.0	ppm	Erosion of natural deposits
Nitrate	10	10	0.1 - 1.5	ppm	Fertilizer, septic tanks, sewer plant discharges, naturally occuring deposits
Sodium	n/a	n/a	15 - 131	ppm	Naturally present in the environment
Organic Chemicals					
Total Organic Carbon (TOC)	Removal Ratio RAA ≥ 1	n/a	RAA = 1.00	n/a	Naturally occuring in plants and the environment, sewer treatment plant discharges
Haloacetic Acids	LRAA ≤ 60	0	LRAA = 12 - 23	ppb	Produced as a byproduct of chlorination at the water treatment plant
Trihalomethanes	LRAA ≤ 80	0	LRAA = 35 - 39	ppb	Produced as a byproduct of chlorination at the water treatment plant
Radioactive Material					
Alpha Radioactivity	15	0	3.2 - 5.1	pCi/L	Erosion of natural deposits
Radium	5	0	0.57 - 0.7	pCi/L	Erosion of natural deposits
Uranium	30	0	0.75 - 3.8	ppb	Erosion of natural deposits
Micro Organisms					
Coliform Bacteria	95% of samples free of coliform bacteria	0	99.93% free of coliform 1 positive in 1504 samples	%	Human and animal waste, stormwater run-offs, sewer plant discharges
Turbidity					
Turbidity	< 0.3 NTU in 95% samples No sample above 1.0 NTU	0 0	100% samples below 0.3 NTU	NTU	Particles and sediment present in natural water sources and stormwater run-off

There were no violations of state or federal drinking water standards in 2013.

Unregulated Contaminants

The Safe Drinking Water Act requires the monitoring and reporting of new, unregulated contaminants every five years. The City of Thornton began monitoring for these contaminants in 2013, and the results are summarized below: There are no MCLs associated with these compounds since they are currently unregulated, and their health impacts have not been established.

Contaminant Detected	Range of Detection (min - max)	Units	Likely Sources of Contaminants
Metals			
Chromium, hexavalent	0.51	ppb	Steel production and plating, wood preservation, erosion of natural deposits
Molybdenum	3.4 - 3.8	ppb	Steel and alloy production, erosion of natural deposits
Strontium	170 - 220	ppb	Glass plating, erosion of natural deposits
Inorganic Chemicals			
Chlorate	180	ppb	Agricultural defoliant or desiccant, disinfection byproduct